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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
DADA, BEEMNET W	
ART UNIT	**PAPER NUMBER**
2135	

DATE MAILED: 03/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/813,693	HILE, WAYNE B.	
	Examiner	Art Unit	
	Beemnet W Dada	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 October 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,7-11,14-23,26-31,34 and 35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4, 7-11, 14-23, 26-31 and 34-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in reply to an amendment filed on October 19, 2004. Claims 1, 10, 20 and 28 have been amended, claims 5-6, 12-13, 24-25 and 32-33 have been cancelled. Claims 1-4, 7-11, 14-23, 26-31 and 34-35 are pending.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1 recites the limitation "the airplane". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-4, 8-10 and 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parvulescu et al (hereinafter referred to as Parvulescu) US Patent No. 6,687,497 B1 in view of Bluestein et al. (hereinafter referred to as Bluestein) US Patent No. 4,531,021.

6. As per claim 1, Parvulescu teaches a method of disabling at least a portion of at least one personal electronic device on board a vehicle, comprising:

sending a radio frequency (RF) signal from a transmitter on the vehicle [column 4, lines 9-33];

receiving the RF signal by a receiver of the at least one personal electronic device [column 5, lines 51-54];

and interpreting the RF signal in a manner causing at least a portion of the at least one personal electronic device to be disabled [column 5, lines 51-64].

Parvulescu does not explicitly teach encrypting and decrypting the RF signal. However encrypting and decrypting of data is old and well known in the art that provides an advantage of enhancing security of a system. For example Bluestein teaches a method of encrypting RF signals at a transmitter [see abstract] and further teaches method of decrypting RF signals at a receiver [see abstract]. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the method of encrypting and decrypting the RF signals at a transmitter / receiver as taught by Bluestein within the method of RF signal transmission taught by Parvulescu in order to securely transmit RF signals between a transmitter and a receiver and further enhance the security of the system by protecting transmitted signal from unauthorized use.

7. As per claim 10, Parvulescu teaches a system for at least partially disabling personal electronic devices within a specified area, comprising:

a transmitter configured to send a radio frequency (RF) signal, the transmitter located within the specified area [column 4, lines 9-33];

a receiver configured to receive the RF signal, the receiver being coupled to the personal electronic device [column 5, lines 51-54];

program logic configured to disable at least a portion of the personal electronic device in response to the RF signal [column 5, lines 51-64].

Parvulescu does not explicitly teach encrypting and decrypting the RF signal. However encrypting and decrypting of data is old and well known in the art that provides an advantage of enhancing security of a system. For example Bluestein teaches a method of encrypting RF signals at a transmitter [see abstract] and further teaches method of decrypting RF signals at a receiver [see abstract]. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the method of encrypting and decrypting the RF signals at a transmitter / receiver as taught by Bluestein within the method of RF signal transmission taught by Parvulescu in order to securely transmit RF signals between a transmitter and a receiver and further enhance the security of the system by protecting transmitted signal from unauthorized use.

8. As per claims 2, the combination of Parvulescu and Bluestein teaches the method as applied above. Furthermore, Parvulescu teaches the method wherein sending the radio frequency signal is carried out more than once during a use of the vehicle [column 4, lines 21-23].

9. As per claims 3 and 14, the combination of Parvulescu and Bluestein teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein the receiver is a Bluetooth receiver (a cellular telephone meets the recitation) [column 5, lines 65-67 and column 6, lines 1-7].

10. As per claims 4,15 and 17, the combination of Parvulescu and Bluestein teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein the receiver is a cellular phone receiver [column 5, lines 65-67 and column 6, lines 1-7].

11. As per claim 8, the combination of Parvulescu and Bluestein teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein sending the radio frequency is continued throughout the duration of a period in which the personal electronic devices are to remain at least partially disabled [column 4, lines 21-23].

12. As per claims 9 and 16, the combination of Parvulescu and Bluestein teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein the at least one personal electronic device includes a handheld computer including an RF receiver (a handheld communication device) [column 5, lines 65-67 and column 6, lines 1-7].

13. As per claim 18, the combination of Parvulescu and Bluestein teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein the at least one of the personal electronic devices is a text messaging device (a cellular telephone meets the recitation) [column 5, lines 65-67 and column 6, lines 1-7].

14. As per claim 19, the combination of Parvulescu and Bluestein teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein the at least one of the personal electronic devices is a laptop computer (a handheld communication device) [column 5, lines 65-67 and column 6, lines 1-7].

15. Claims 7, 11, 20-23, 26-31, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parvulescu (US Patent No 6,687,497 B1) in view of Bluestein (US Patent No. 4,531,021) and further in view of Beamish et al (hereinafter referred to as Beamish) (US Patent No. 6,694,143).

16. As per claims 20 and 28, Parvulescu teaches a method of preparing an airplane for takeoff, the method comprising:

transmitting a radio frequency (RF) signal configured to be received by RF receivers of the personal electronic devices on board the airplane and configured to cause at least partial disablement of the personal electronic devices [column 4, lines 9-33 and column 3, lines 64-69]. Parvulescu does not explicitly teach encrypting and decrypting the RF signal. However encrypting and decrypting of data is old and well known in the art that provides an advantage of enhancing security of a system. For example Bluestein teaches a method of encrypting RF signals at a transmitter [see abstract] and further teaches method of decrypting RF signals at a receiver [see abstract]. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the method of encrypting and decrypting the RF signals at a transmitter / receiver as taught by Bluestein within the method of RF signal transmission taught by Parvulescu in order to securely transmit RF signals between a

transmitter and a receiver and further enhance the security of the system by protecting transmitted signal from unauthorized use.

Furthermore, Parvulescu teaches disabling an electronic device on board the airplane that are capable of disrupting the airplane flight equipment during flight takeoff and landing [column 3, lines 64-69]. The combination of Parvulescu and Bluestein does not explicitly teach providing a warning message to passengers relating to the disablement of personal electronic devices on board the airplane.

However Beamish teaches a method of providing a warning message to passengers relating to the disablement of personal electronic devices on board the airplane [column 2, lines 23-35, column 1, lines 31-37]. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a warning message to passengers relating to the disablement of electronic device as per teachings of Beamish within the method of disabling electronic device on board airplane as taught by Parvulescu and Bluestein, in order to alert passengers turn off personal electronic device during airplane takeoff and landing and further protect from RF interferences.

17. As per claims 21 and 29, the combination of Parvulescu, Bluestein and Beamish teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein transmitting the RF signal is carried out more than once [column 4, lines 21-23].

18. As per claims 22 and 30, the combination of Parvulescu, Bluestein and Beamish teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein the atleast one of receiver is a Bluetooth receiver (a cellular telephone meets the recitation) [column 5, lines 65-67 and column 6, lines 1-7].

19. As per claims 23 and 31, the combination of Parvulescu, Bluestein and Beamish teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein the at least one of the receivers is a cellular phone receiver [column 5, lines 65-67 and column 6, lines 1-7].

20. As per claims 26 and 34, the combination of Parvulescu, Bluestein and Beamish teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein transmitting the RF signal is continued throughout the duration of a period in which the personal electronic devices are to remain at least partially disabled [column 4, lines 21-23].

21. As per claims 27 and 35, the combination of Parvulescu, Bluestein and Beamish teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein at least one of the personal electronic devices includes a handheld computer including an RF receiver (a hand held communication device) [column 5, lines 65-67 and column 6, lines 1-7].

22. As per claims 7 and 11, the combination of Parvulescu and Bluestein teaches a method of disabling at least portion of at least one personal electronic device on board a vehicle as applied above to claims 1 and 10 above. The combination of Parvulescu and Bluestein does not explicitly teach providing an announcement relating to the disabling of personal electronic device. However Beamish teaches a method of providing a warning message to passengers relating to the disablement of personal electronic devices on board the airplane [column 2, lines 23-35, column 1, lines 31-37]. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a warning message to passengers

relating to the disablement of electronic device as per teachings of Beamish within the method of disabling electronic device on board airplane as taught by Parvulescu-Blustein, in order to alert passengers turn off personal electronic device during airplane takeoff and landing and further protect from RF interferences.

Response to Arguments

23. Applicant's arguments filed October 19, 2004 have been fully considered but they are not persuasive. Applicant argues that there is no suggestion or motivation to combine Bluestein with Parvulescu. Examiner respectfully disagrees.

24. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, encrypting and decrypting of data is old and well known in the art that provides an advantage of enhancing security of a system. Bluestein teaches a method of encrypting RF signals at a transmitter [see abstract] and further teaches method of decrypting RF signals at a receiver [see abstract]. Therefore modifying Bluestein within the system of Parvulescu further enhances the security of the system by protecting transmitted signals from unauthorized use.

Conclusion

25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beemnet W Dada whose telephone number is (571) 272-3847. The examiner can normally be reached on Monday - Friday (9:00 am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Beemnet Dada

February 22, 2005

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